

REMARKS

Request for Withdrawal of Finality of Office Action

The Final Office Action contains new grounds of rejection based on newly cited prior art. The Office Action states that applicants' amendments in the previous Reply necessitated the new grounds of rejection. Applicants respectfully disagree. Applicants' amendments in the previous reply necessitated withdrawal of the previous grounds of rejection but it was not applicants' amendments that necessitated the new grounds of rejection. The new grounds of rejection were necessitated by the discovery of previously overlooked prior art by the PTO. The newly cited references were in existence when the initial Office Action was made and they certainly could have been applied against the previous claims in the first Office Action in the same manner as they are here. Applicants' previous amendments did not broaden the scope of the claims, thus, the references would have been applicable in the same manner against the original claims as they are applied here. By making the current Office Action Final, applicants are being denied a full and fair opportunity to respond to the new rejection even though the new rejection was not necessitated by their actions. Thus, the finality of the previous rejection should be withdrawn and applicants should be provided the opportunity to freely amend the claims in response to the new grounds of rejection. At the least, even if finality is not withdrawn, the amendments made herein should be entered and considered since they were made as a result of applicants' first opportunity to address the newly cited prior art.

The Amendments

Claim 1 is amended to clarify the alternative definition of the R⁶ and R⁷ groups. The

new recitation is that, in the alternative when R⁶ and R⁷ each are hydrogen, fluorine or a straight, branched or cyclic alkyl or fluorinated alkyl group of 1 to 20 carbon atoms, one of R⁶ and R⁷ is a fluorinated alkyl group of 1 to 20 carbon atoms. This is supported by the general recitation for this alternative, i.e., the additional requirement must fall within the general requirement for R⁶ and R⁷. It is submitted that the above amendments would put the application in condition for allowance or materially reduce or simplify the issues for appeal. The amendments do not raise new issues or present new matter and do not present additional claims. The amendments have been made to address the new grounds of rejection over newly cited prior art. Thus, they could not have been earlier presented. Accordingly, it is submitted that the requested amendments should be entered.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

The Rejection under 35 U.S.C. §102

The rejection of claims 1, 3-6, 8-10 and 19-20 under 35 U.S.C. §102(e), as being anticipated by Aoi (US 2002/0061464 A1) is respectfully traversed.

Aoi discloses a positive resist composition containing a fluorinated polymer. Among the many fluorinated polymers contemplated are those of general formula (VI) which has a side chain of a carbonyloxy, bonded to A₂ (which includes cycloalkyl among others), to

which is bonded $C(CF_3)_2OR_5$. The reference exemplifies groups (F-30) to (F-34) at page 15 and (F-36) to (F-39) at page 16 which fall within this formula. A monomer (b) used to provide one of these side chains is used to prepare the polymer in Synthesis Example 3.

The Aoai polymers used in their resist compositions do not fall within or suggest the polymers of instant claim 1. It is alleged in the Office Action that the resulting side chain unit from polymer made with monomer (b) (or those similar ones of formulae (F-30) to (F-39) of Aoai) would fall within the language of the instant claims. Applicants respectfully submit that the Aoai polymers prepared from monomer (b) or similar monomers do not have, on the ring system bonded to the main chain through carbonyloxy, a substituent which is "a fluorinated alkyl group of 1 to 20 carbon atoms." Compare the definition of the first alternative of groups R^6 and R^7 of instant claim 1. The corresponding substituent on the side of the Aoai polymers is a fluorinated ether or alcohol group which requires an oxygen atom. The term "fluorinated alkyl" group does not encompass fluorinated ether or alcohol groups. The plain meaning of the term "alkyl" contemplates only a saturated hydrocarbon group, i.e., containing only hydrogen and carbon atoms. Thus, a fluorinated alkyl would only be a saturated hydrocarbon group wherein at least one hydrogen is replaced by fluorine. This would be the plain meaning of the term and the meaning which would be understood by one of ordinary skill in the art. See also the disclosure at page 7, lines 23-33, of the instant specification making clear that applicants use of the term is consistent with this plain meaning. The polymers of Aoai, thus, do not meet the elements of the instant claims.

In the Office Action, it is argued that the "comprising" term of instant claim 1 opens the term "alkyl" up to inclusion of other substituents and, thus, the claims encompass an R^6 or R^7 substituent which is alkyl with further oxygen atoms as in the Aoai polymers. Applicants respectfully disagree with this interpretation of the claims. The term "comprising" means the

claim is directed to the stated elements but allows the addition of further elements. It does not mean that the stated elements of the claim may be changed. Adding the oxygen atoms as in Aoi to the polymer changes "fluorinated alkyl" element of the claims to some other element, i.e., an ether or alcohol group. Under the theory of the rejection, the term "alkyl" would be considered to encompass nearly any organic group which contains carbon, hydrogen and any other additional atoms in any configuration. This is not, and never has been, how claims using language such as in applicants' claims – which is commonly used – have been interpreted by the PTO or the courts.

Further, the case law is clear that the transitional term "comprising" leaves the literal interpretation of the claim open only as to elements not otherwise specifically set forth in the claim. See, e.g., Moleculon Research Corp. v. CBS, Inc., 229 USPQ 805, 812 (Fed. Cir. 1986), wherein it was found that a claim reciting in part ".. which comprises .. engaging eight cube pieces.." did not read on a step wherein more than eight cube pieces were engaged. The term "fluorinated alkyl of 1 to 20 carbon atoms" is specifically set forth in the claims and has an understood definition. In analogy to the Moleculon Research decision, the use of the transitional "comprising" in the claim does not open the literal interpretation of "fluorinated alkyl of 1 to 20 carbon atoms" to include such groups which additionally have oxygen atoms.

For all of the above reasons, it is urged that the polymers of Aoi do not fall within the literal interpretation of the instant claims. Thus, they do not meet all elements of the claims and do not anticipate the instant claims and the rejection under 35 U.S.C. §102 should be withdrawn.

The Rejection under 35 U.S.C. §103

The rejection of claim 7 under 35 U.S.C. §103, as being obvious over Aoi, as applied

above, in view of Niinomi (U.S. Patent No. 6,090,518) is respectfully traversed.

The discussion of Aoai from above is incorporated herein by reference. As discussed above, Aoai fails to disclose polymers which contain a fluorinated alkyl group at the position corresponding to R⁶ or R⁷ of the instant claims. There is no motivation or suggestion from Aoai to modify its polymers which contain an ether or alcohol group at the corresponding position to provide a fluorinated alkyl group. Such modification to remove a significant functional ether or alcohol group would not be considered by one of ordinary skill in the art to be an obvious modification and there is no evidence of record to support that it would be.


Niinomi was cited for its teachings regarding dissolution inhibitors. It provides no teachings which would suggest modifying the Aoai polymer in a manner which would suggest applicants' claimed polymers. Thus, even if the dissolution inhibitors of Niinomi were used in a resist composition of Aoai, the claimed invention would not be suggested thereby.

Accordingly, the combined teachings of the cited prior art fail to render the claimed invention obvious to one of ordinary skill in the art. Thus, the rejection under 35 U.S.C. §103 should be withdrawn.

It is submitted that the application is in condition for allowance. But the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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